

A NEW AGE OF NEURAL IMPLANTS

Have we entered the age of neural implants? Research in the field is booming. Medtronic, Inc. of Minneapolis, USA, has developed a device called a "deep brain stimulator", based on an electrode inserted in the brain. A tiny generator implanted in the chest cavity sends signals to the electrode which stimulates the brain, supposedly reducing neuromuscular tremors associated with Parkinson's disease.

Philip Kennedy and Dr Roy Bakay at Emory University in Atlanta, Georgia, have used implants to help speech-impaired patients communicate through a computer. And researchers at the University of Southern California are developing microelectromechanical systems that bind to and wirelessly monitor individual neurons—devices they hope one day will reconnect the severed bridge between a paralytic's mind and muscle.

Using very large scale integrated circuit technology, or VLSI, scientists can build millions of transistors on a single wafer, creating circuits that mimic basic neural operations in mammals.

A Los Angeles team at the University of Southern California, for example, has mathematically modelled neural circuitry and recreated it on silicon-based integrated circuits small enough to be implanted in the brain. Those circuits, if firmly affixed



to groups of neurons, could theoretically recouple neuronal connections destroyed by disease or accident.

(Source: By Kelly Hearn, *United Press International*, 9 May 2001)

CELLPHONES TO HAVE LOCATION-TRACKING BY 2005

By 2005, the government will be able to track you down through your cellphone. Cellphone manufacturers in the USA are under a federal mandate to equip mobiles with location-tracking technology beginning this October.

By 2005, 95 per cent of all cellphones must be able to be traced with an accuracy

of about 1,000 feet or better.

While such phones could be life-savers in an emergency, the order from the Federal Communications Commission has raised serious questions about invasion of privacy. Making mobile phones capable of tracking users' locations will involve planting GPS chips in the handsets or installing new infrastructure in cell sites.

Cellular providers plan commercial uses for the technology, such as getting directions if someone is lost, finding nearby restaurants or locating family members and friends who have become separated in a crowd.

"Wireless operators already know where consumers are by virtue of the fact that the phone is on," pointed out Ken Arneson, the chief strategy

officer at Telecommunication Systems, a provider of the location-tracking technology. "What's different here is that now carriers are looking to commercialise that and need to do that to offset the cost of putting this technology in place."

He estimated that it could cost billions of dollars to outfit the 110 million cellphones in the United States with the tracking mechanism.

(Source: *Foxnews*, 23 April 2001, <http://foxnews.com>)

BIZARRE CHEMICALS FORMED IN IRRADIATED FOOD CAN DAMAGE DNA

In a rare opportunity to speak publicly about food irradiation before a captive audience of government officials and food industry executives, Public Citizen has released the English translation of a recent German study revealing that a chemical formed in irradiated food can damage DNA.

The study confirms what safe-food advocates and many pioneering researchers have known for more than 30 years: that exposing food to ionising radiation can lead to the formation of bizarre new chemicals called "unique radiolytic products" that can cause serious health problems.

One such chemical, known as 2-DCB, caused "significant DNA damage" in the colons of rats that ate the substance. The chemical—which, ironically, is a well-known "marker" for determining whether food has been irradiated—has never been



found naturally in any food on Earth.

The study was conducted in 1998 under the auspices of two prominent pro-irradiation organisations. It was performed at one of the most prestigious food irradiation labs in the world: the Federal Research Centre for Nutrition in Karlsruhe, Germany. And it was co-funded by the International Consultative Group on Food Irradiation, a United Nations-sponsored organisation that promotes food irradiation worldwide.

Public Citizen released an English translation of the study at a meeting on 13 February at the US Food and Drug Administration in Washington, DC. The meeting was held to preview the March meeting of the Codex Alimentarius Commission, which sets food safety standards for most nations of the world.

Codex officials considered a proposal to remove completely the maximum dose of radiation to which food can be exposed. The current maximum dose is 10 kilograys—the equivalent of 330 million chest X-rays, and enough radiation to kill a person 2,000 times over.

(Source: Public Citizen, 11 March 2001; <http://www.citizen.org>)

OESTROGEN MIMICS ARE COMMON IN SUNSCREENS

Gender-bending chemicals that mimic the effect of oestrogen are common in sunscreens, warns a team of Swiss researchers.

Margaret Schlumpf from the Institute of Pharmacology and Toxicology at the University of Zurich, Switzerland, and her colleagues tested six common UV screening chemicals used in sunscreens, lipsticks and other cosmetics. All five UVB screens—benzophenone-3, homosalate, 4-methyl-benzylidene camphor (4-MBC), octyl-methoxycinnamate and octyldimethyl-PABA—behaved like oestrogen in laboratory tests, making cancer cells grow more rapidly.

One of the most common sunscreen chemicals, 4-MBC, had a particularly strong effect. When the team mixed it with olive oil and applied it to rat skin, it doubled the rate of uterine growth well before puberty.

"That was scary, because we used concentrations that are in the range allowed in sunscreens," Schlumpf said.

(Source: New Scientist Online News, 18 April 2001, www.newscientist.com)

EUROPEAN UNION CAN LEGALLY SUPPRESS DISSENT

The European Court of Justice (ECJ) ruled in March that the European Union can suppress criticism to protect its reputation.

The Court ruled that the Commission could restrict criticism that damaged "the institution's image and reputation", and that it could do so by resorting to a legal device used by fascist governments to suppress dissent in the 1920s and 1930s: "the protection of the rights of others". This ECJ ruling defies half a century of case law by Europe's other court, the non-EU Court of Human Rights in Strasbourg, and also resurrects the ancient offence of "seditious libel", banned by the House of Lords.

The Human Rights Court has ruled repeatedly that governing bodies may not restrict criticism in such a way. Specifically, the term "protection of the rights of others" does not apply to public bodies. The ruling shows that the ECJ (despite paying lip-service) does not consider itself bound by the European Convention on Human Rights, drafted by British lawyers after the Second World War to safeguard liberty in Europe.

This is an extremely serious development, because the EU's new Charter of Fundamental Rights extends the ECJ's competence into the area of civil liberties, transforming it from a commercial court dealing with single market issues to a fully fledged supreme court. The ECJ has already begun referring to the charter in its

rulings, demolishing the British Government's pretence that the document has no real legal status.

The door could be soon be open for the ECJ to start ruling on free speech cases involving ordinary EU citizens or, indeed, Euro-sceptic newspapers. We now have two rival sets of European rights law, overseen by rival courts with very different views of civil liberty: the ECJ and the Charter on one side, set against the Human Rights Court and the Convention on the other. The battle is just beginning.

(Source: By Ambrose Evans-Pritchard, The Telegraph, London, 10 March 2001, www.telegraph.co.uk)

NEW SMART BARCODES RAISE PRIVACY CONCERNS

Within a few years, unobtrusive tags on retail products will send radio signals to their manufacturers, collecting a wealth of information about consumer habits—and also raising privacy concerns.

It's 2010, and an ordinary day on an assembly line. A bottle of root beer is stamped with an innocuous little tag that immediately begins sending messages into cyberspace. The tag radios the soda company's website to report the bottle's whereabouts, allowing computers to track the bottle as it moves from the factory, through warehouses and distribution centres and into a refrigerator at a corner store. When the bottle is sold, the manufacturer is alerted and orders a new one to take its place. Finally, facing reincarnation



FARMER UNJUSTLY LIABLE FOR VIOLATING GE SEED PATENT

On 29 March 2001, a Canadian judge dealt a crushing blow to farmers' rights by ruling that Percy Schmeiser, a third-generation Saskatchewan farmer, must pay Monsanto thousands of dollars for violating the corporation's monopoly patent on genetically engineered (GE) canola seed.

Under Canadian patent law, as in the US and many other industrialised countries, it is illegal for farmers to re-use patented seed or grow Monsanto's GE seed without signing a licensing agreement.

If the biotech corporations and US trade reps get their way, every nation in the world will be forced to adopt patent laws that make seed-saving illegal. The ruling against Schmeiser establishes an even more dangerous precedent because it means that farmers can be forced to pay royalties on GE seeds found on their land, even if they didn't buy the seeds or benefit from them.

Percy Schmeiser did not buy Monsanto's patented seed, nor did he obtain the seed illegally. Pollen from Monsanto's GE canola seeds blew onto his land from neighbouring farms, without his consent. (Percy Schmeiser's neighbours and an estimated 40% of farmers in western Canada grow GE canola.) Shortly thereafter, Monsanto's "gene police" invaded his farm and took seed samples without his permission. Percy Schmeiser was a victim of genetic pollution from GE crops, but the court says he must now pay Monsanto US\$10,000 for licensing fees and up to US\$75,000 in profits from his 1998 crop.

The GE canola that drifted onto Schmeiser's farm was engineered to withstand spraying of Monsanto's proprietary weedkiller, Roundup. But Schmeiser did not use Roundup on his canola crop. After all, if he'd sprayed his crop, the chemical would have killed the majority of his canola plants that were not genetically engineered to tolerate the weedkiller!

Schmeiser didn't take advantage of Monsanto's GE technology, but the court ruling says he's guilty of using the seed without a licensing agreement. He has now filed a counter-suit against Monsanto, but needs help with legal costs (visit Schmeiser Defense Fund, www.percyschmeiser.com).

Meanwhile, Monsanto has threatened to "vigorously prosecute" hundreds of cases against seed-saving farmers.

(Source: Rural Advancement Foundation International, 2 April 2001, www.rafi.org)

THE LAST PRESIDENT TO DEFY THE FEDERAL RESERVE

President John F. Kennedy was the last President on record to defy the Federal Reserve System—and look what happened to him. The circumstances surrounding the assassination of President Kennedy remain unresolved at best. What is known, however, is that Kennedy was in many ways a maverick, who, as President, often acted independently and at times in direct conflict with the agendas of many powerful Washington insider interests. One of the most powerful of these interests was the Fed.

Economist Seymour Harris described Kennedy as "by far the most knowledgeable President of all time in the general area of economics". Professor Donald Gibson, in his 1994 book, *Battling Wall Street: The Kennedy Presidency*, documents much of the Kennedy economic program, including:

- Tax proposals to redirect the foreign investments of US companies;
- Making distinctions in tax reform between productive and non-productive investment;
- Eliminating the tax privileges of US-based global investment companies;
- Cracking down on foreign tax havens;
- Supporting proposals to eliminate tax privileges for the wealthy;
- Proposing increased taxes for large oil and mineral companies;
- Revising the investment tax credit;
- Making a proposal to expand the powers of the president to deal with recession.

President George W. Bush, to bolster his tax-cut proposal, has accurately demonstrated how Kennedy, in 1961, passed a much larger and broader tax cut than the one he is presently proposing. At the time, Kennedy articulated a profound understanding of the economic principle of leaving the maximum amount of capital at the source of production, with the taxpayer. Most economists agree that the Kennedy tax cut contributed greatly to the prosperous economy of the 1960s. And President Reagan's 1981 tax cut contributed to the prosperity of the 1980s and 1990s.

With regard to the Fed, James J. Saxon, Kennedy's comptroller of the currency, encouraged a policy of broader investment and lending powers to be granted to non-Fed-affiliated banks. This would involve allowing for the setting of interest rates by these independent banks and lenders that could compete with those set by the Fed and its affiliates. Saxon also decided that these non-Fed banks and institutions could underwrite state and local bond issuances, an area that had been a bailiwick for Fed-affiliated banks. These policies set the Kennedy administration at odds with the powerful central banking system. The Fed seeks to increase further its monopolistic prerogative over the issuance of currency and the setting of interest rates.

In June 1963, President Kennedy authorised the issuance of more than US\$4 billion in debt-free "United States Notes" through the US Treasury. This extraordinary act completely circumvented the Fed, which expects to be called upon to lend currency—at interest accruing to themselves—to the US Government. Perhaps Kennedy reasoned that this currency would reduce the national debt by avoiding the necessity of paying interest to the Fed.

The last time a President tried this was in 1862, when Abraham Lincoln authorised the issuance of US\$450 million in debt-free currency—known at the time as "greenbacks"—through the US Treasury, rather than borrow money from the banking establishment. Lincoln stated: "Government possessing power to create and issue currency...need not and should not borrow capital at interest... The privilege of creating and issuing money is not only the supreme prerogative of the government, but is the government's greatest creative opportunity."

It is a fascinating coincidence that Presidents Abraham Lincoln and John F. Kennedy were both assassinated. Kennedy opposed many powerful interests during his all-too-brief Presidency, not the least of whom were those in his own government, such as the likes of McNamara, Rusk, Rostow and the Bundy brothers, who were clamouring for war in Vietnam.

The widow of accused assassin Lee Harvey Oswald, in a 1994 interview with author A. J. Weberman, said the following: "The answer to the Kennedy assassination is with the Federal Reserve Bank. Don't underestimate that. It's wrong to blame it on [CIA official James] Angleton and the CIA *per se* only. This is only one finger of the same hand. The people who supply the money are above the CIA."

(Source: by Chuck Morse, 29 March 2001, www.chuckmorse.com)